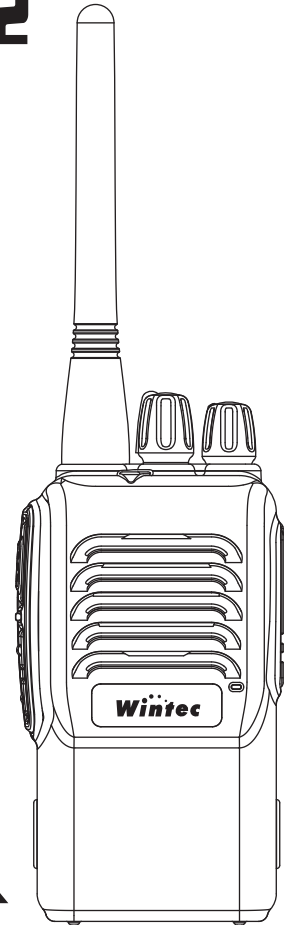


Wintec

PROFESSIONAL FM TRANSCEIVER

LP-202

www.wintec.com.tw



USER MANUAL

Thank you for purchasing LP-202 two-way radio manufactured by Wintec Co., Ltd. Based on the ever-changing innovative technology, we have been able to develop many different wireless products that have gained widely consumers' affection. Besides our appreciation for your love of our products, we even wish you to be attentive to new product information. Your precious comment will be appreciated by us. Please read through the manual carefully to learn whole features of this model.

Features

- Wide frequency coverage.
 - 16 programmable channels and 2 programmable function keys variable filter design, providing excellent anti-interference ability, high power output allows you to speak smoothly in noisy environment.
 - Digitally designed to ensure stable quality.
 - Extra-small size in rugged case.
 - 2-tone, 5-tone
 - High quality sound 40mm speaker.
 - Independent TX/RX CTCSS/DCS.
 - Narrow band (2.5K) / Wide band (5K) programmable options.
 - 9 steps of VOX (voice-activated feature).
 - Programmable PRI / SCAN channel function.
 - Multiple programmable functions.
 - Volume Indicator.
 - Chinese / English voice in operation.
-

Recycle Marking



Safety Warning

Consumers need to have clear understanding of safety use of this product.

Turn off power before fueling or parking at the gas station.

Safety Information

1. Self-replacing or re-structuring of any parts by is legally not permitted or will lose license.
 2. Use is prohibited at restricted environment declared by authority, during flight, highly-explosive area like near mining areas.
 3. Avoid storing in high temperature or humid place for long time.
 4. Turn to lowest volume if external Mic/Speaker is used, then adjust appropriately.
 5. If strange smell or smoke comes off from radio, dispatch to service center immediately.
 6. Never use other power sources for charging other than the standard charger set designed for this radio model.
 7. Take off battery pack if out of use for long Time.
-

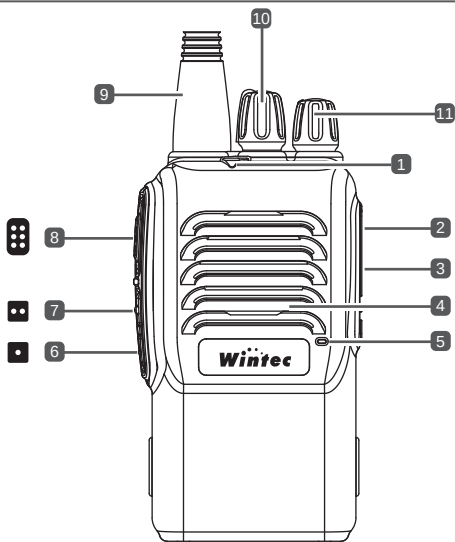
Low Battery Notice

1. When battery is low, you will hear a beep sound for every transmission to remind user battery is low. At main time, power output will automatically change to M level automatically.
2. When battery is extremely low, you will hear twice beep sounds for every transmission. At main time, power output will automatically change to Level automatically.
3. When battery is used up, radio will automatically turn OFF.

Contents

Radio Controls / Functions.....	1
Operation Guide.....	2
Programmable Functions.....	4
Installation of Battery.....	7
Connecting of External MIC / Speaker.....	8
Charging of Battery.....	8
Specifications.....	9
Accessories.....	10

Radio Controls / Functions



- 1 LED Indicator
- 2 External SP / MIC
- 3 USB Programming Port
- 4 Speaker
- 5 Mic
- 6 Programmable keypad P1
- 7 Programmable Keypad P2
- 8 (Push-to-talk) PTT button
- 9 Antenna
- 10 16 programmable channel switch On / Off
- 11 Power Switch / Volume Control

Operation Guide

Power On / Off

1. Rotate the Power switch / volume control knob clockwise to switch power ON. When the click sound of switch and the melody is heard, the transceiver is powered.
2. Rotate the Power switch / Volume control knob counterclockwise to switch power OFF. When the click sound of switch is heard, transceiver's power is turned off.

Receiving / Transmitting

1. Rotate the channel control knob to the desired channel, press and hold PTT button. The LED lamp turns red during transmission. Talk to the speaker microphone from a distance of 5 cm and speak in general volume.
2. Release PTT button for the transceiver for receiving. During receiving, LED light turns on green. And you can hear the sound from the transmission unit.

Adjusting Volume

1. For the adjustment of volume, rotate the Power /Volume control knob in clockwise direction to increase volume. Rotate Power/Volume knob counterwise to decreases volume.
2. Rotate the Power switch/Volume knob slowly to avoid outburst of sound harmful to ears. Too low volume might miss users' attention. Adjust volume to an appropriate level.

Attention: adjust volume in low before connecting to the earphone headset.

Assignment of channels

This function can only be programmed by the dealers.

There are channels 1 ~ 16 selectable by channel control knob. All such 16 channels are dealer-programmable for authorized use by consumers. In other words, if consumer tries to adjust to any unauthorized channel, speaker sounds beeps and LED lamp turn on orange.

Priority Channel Scanning

This dealer-programmable function can be activated by the dealers by selecting PRI CH.

During programming, assign a channel as "PRI.CH". Transceiver will scan this channel in priority with others interchangeably.

Ex: If channel 3 is assigned to be "PRI.CH", scan sequence will be CH1, CH3(P), CH2, CH3(P), CH3, CH3(P), CH4, CH3(P), ... The scanning will continue until channel knob is rotated (or) scan button is hold on. During scanning, if busy channel is found, transceiver stops scanning to allow radio-communication. It will continue scanning after 3 seconds from the end of reception or transmission.

If scanned-out channel is not priority channel, the transceiver will leave it to priority channel for 3 seconds to channel the signal and will stay standby on priority channel to check if there is signal coming in. It will change to back to receiving channel after 3 seconds from the end of reception or radio-communication on priority channel. While there is no signal and if PTT is pushed, transmission is done from priority channel.

Low Battery Warning

1. There are speech sounds to remind you when battery is low in English (Battery Low) or Chinese (請充電). The battery needs to be charged immediately.
2. When battery is near to exhausted, it will remind you every one second and the power output will lower. By the time battery is exhausted, radio will turn off it selves. Please change new battery or battery needs to be charged.

Programmable Functions

Introduction to programmable functions (Use WPS-200 software for programming)

Please advise the official dealers to receive an authorized file to perform the programming software.

Channel Setting

Programmable Functions on 16 Channels	Explanation
Alias	It can be programmed and named the Channel by defining the Name in English or by numbers. When General setting to be selected as Channel Name, you can see the Name defined on Channels.
Tx Frequency	The TX step-up freq at 5Khz within frequency range.
Rx Frequency	The RX step-up freq at 5Khz within frequency range.
Tx Tone Type	CTS/DCS ENC is programmable to "OFF" CTS(1~51+ 1 User) DCS Normal(83+1User) DCS Invert(83+1User)
Rx Tone Type	CTS/DCS ENC is programmable to "OFF" CTS(1~51+1User) DCS Normal(83+1User) DCS Invert(83+1User)
W/N band	RX/TX is selectable to Narrow Band (2.5KHz) Or Wide Band (5KHz).
Tx Power	TX power is selectable to LOW or HI.
TOT	TIME OUT TIMER is selectable to 30, 60, 90, 180, 360 sec.
BCLO	BCLO is selectable to be OFF / BCL / BTL.
VOX	VOX TX is selectable OFF or ENSITIVITY L0~L9.
Scrambler	Selectable from 0~9, the "0" means to turn off this function.
Compandor	Setting compandor "ON" can enhance the quality of voice in communication.

General Setting

General Programmable Functions	Explanation
User Name	If the radio is connected to the PC by WPS-200 (PC software), the user name will appear on the software.
SQL	The setting ranges from L0~L9 (Default at L3)
APO	AUTO POWER OFF (APO) is selectable to be 30, 60, and 120 mins (Default at OFF)
Noise Cancel	selectable to be 0:Disable / 1: Normal / 2:Strong
Roger Tone	selectable to be ON or OFF. If it is ON, it will send out beep sound when finish the transmitting. (Default at OFF)
Power Save	Selectable to be OFF / 1:1 / 1:2 / 1:3 / 1:4(Default at)

Scan Setting

Scanning Functions	Explanation
PriCh	1. Priority channel number must be selected before this function is activated for Priority Scan and Dual Watch function. 2. When PRI Channel is activated, priority channel will automatically be scanned on the channel and transmission is done from it.
Response	There are three kinds of scanning modes BR / TR / HOLD BR: The scanning process will pause when signal comes in and perform scanning again when signal discontinued. TR: The scanning process will pause by 3, 5, 10 secs once signal comes in and continue to perform scanning after time out again even during the signal is receiving. HOLD: The scanning process will stop immediately and skip out when signal comes in. It needs to be started again for continuing the scanning.
Time	TR time can be set by 3, 5, and 10 secs.
Group	There are totally 16 groups that can be set by channels.

Programmable Key Setting

Programmable Key P1 P2 functions are operable only by dealers. It is not intended for use by general consumers. The the functions for P1 and P2 can be defined separately in long or short press on the buttons.

The factory default set on P1 button & P2 button:

Long press P1: No Use, Short press P1: Noise Cancel

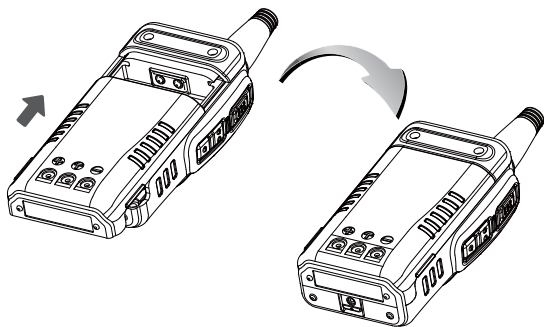
Long press P2: Monitor

The radio will send out "Do Re Mi" melody to remind you that Noise Cancel is on and send out "Do" melody when the Noise Cancel is off.

Function button P1~P2	Explanation
0. None	Assign the buttons to be no use.
1. TA (Talk Around)	The setting on transmission channel will change to the same as the receiving channel, including the frequency.
2. Scan	Channel Scanning will perform to scan the Pri channel if it is set in advance. If not, the radio will perform the general scanning on channels.
3. Power Switch	It can temporarily switch to High or Low power when press this button. The change on the channel will restore to the factory setting.
4. Noise Cancel	NC function can elevate the quality of voice in communication.
5. Key Lock	Press the button once to enable or disable the keylock. When keylock is enabled, you are not able to change the channels and functions.
6. SendCall	Long Programmable Keys can set Send Call tone function. Press the button longer to send out the call tone. Release it to stop the transmission.
7. Monitor	Long Programmable Keys can set Monitor function. Press the button longer to enable the monitor function, release the button to stop in monitoring.

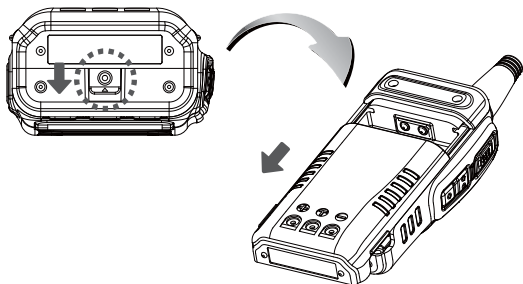
Installation on Battery

To Install



Place battery pack into battery compartment, and push the battery upward when the click sound of switch is heard, it will lock into compartment.

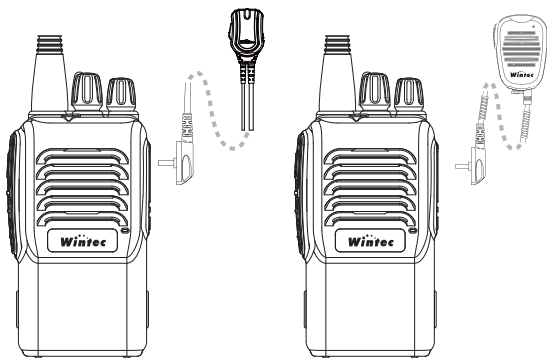
To Remove



1. Holding radio in one hand, push down battery latch on the button.
2. Slide battery pack backwards until the battery is apart from the radio unit.

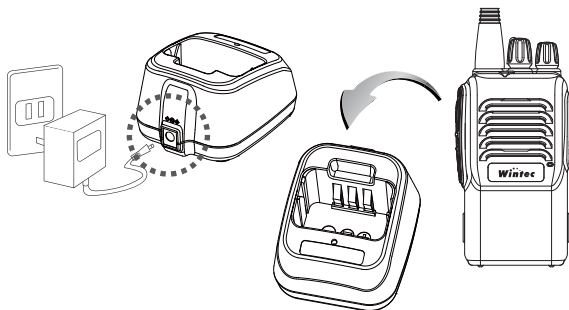
Connecting of External MIC / Speaker

1. Remove accessory jack cover.
2. Insert accessory jack.



Charging of Battery

Power drop-in charger with standard AC/DC wall charger. Drop in radio installed with battery into the battery-with-radio slot. Spare battery pack into the battery-only slot. Single or dual charging is possible. Each LED light individually indicates charging slot in process. LED flash in green when battery in slot is fully charged.



Specifications

General

Frequency Range	135~175MHz、400~480MHz
Channel Spacing	12.5/25.0KHz
Programmer Channel Number	16
Frequency Stability	±1.5PPM
Sub-Audio Type	CTCSS/DCS
Antenna Impedance	50Ω
Battery Type	BT 20LI(1350mAh)
Power Voltage Range	7.4V
Temperature Range	-30 ~ +70°C
Weights	220g With antenna & Battery
Dimensions	98.5(H)×17.5(W)×35(D)mm without antenna

Transmitter

Max RF Power (@ DCV)	5.00W(@7.4V)
Modulation(W/N)	16K0F3E, 11K0F3E
Spurious emissions	70dB

Receiver

Sensitivity (12 dB SINAD)	-120dBm
Adjacent Channel Selectivity	70/65dB
Intermodulation	70/65dB
Spurious & image Rejection	70dB
Audio Power	600mW@16Ω For 5% THD

Accessories



BT FR 20LI
7.4V/1350m AhLi-ion battery



LP-CHG 20
Desktop rapid charger



LP-20A
Earphone headsets



LP-20B
Earphone headsets



LP-20C
Air-tube headsets



LP-10M
Belt clip swivel belt clip for best placement
and take-out the radio



LP-84M
Belt clip swivel belt clip for best placement
and take-out the radio



LP-84L
Belt clip swivel belt clip for best placement
and take-out the radio



WI AL20
Programmable cables for programmable type



PB10
Leather case



ANT 20 UHF M
ANT 20 VHF-LOW M
ANT 20 VHF-HIGH M



ANT 20 UHF L
ANT 20 VHF-LOW L
ANT 20 VHF-HIGH L